AMENDMENTS TO THE CLAIMS

1. (previously presented) A system for printing durable ink-jet ink images, comprising:

a) offset media;

b) an aqueous ink-jet ink comprising latex particulates dispersed therein and including a pigment colorant, said ink-jet ink being configured to be ink-jetted onto the offset media;

c) a fixer composition including a crashing agent that is reactive with a component of the ink-jet ink, said fixer composition being configured to be overprinted or underprinted on the offset media with respect to the ink-jet ink; and

d) a calendering device configured for applying pressure and heat to offset media once the ink-jet ink is ink-jetted thereon, wherein the pressure is mechanical pressure applied at from 500 psi to 3000 psi, and wherein the heat to be applied is from 20°C to 90°C.

2. (canceled).

3. (previously presented) A system as in claim 1, wherein the crashing agent is present in the fixer composition at from 0.1 wt% to 10 wt%.

4. (previously presented) A system as in claim 1, wherein the latex particulates are dispersed in the ink-jet ink at from 0.1 wt% to 15 wt%.

5. (original) A system as in claim 1, further comprising an overcoat composition including a liquid vehicle having latex particulates dispersed therein, said overcoat composition being configured to be overcoated with respect to the ink-jet ink.

6. (original) A system as in claim 5, wherein the latex particulates are present in the overcoat composition at from 0.1 wt% to 15 wt%.

7 – 9. (canceled).

10. (previously presented) A system as in claim 1, wherein the crashing agent is selected from the group consisting of cationic polymers, multivalent metal ions or ionic groups, acids, and combinations thereof.

11. (original) A system as in claim 10, wherein the crashing agent is a cationic polymer selected from the group consisting of polyvinylpyridines, polyalkylaminoethyl acrylates, polyalkylaminoethyl methacrylates, poly(vinyl imidazole), polyethyleneimines, polybiguanides, polyguanides, polyvinylamines, polyallylamines, polyacrylamines, polyacrylamides, polyquaternaryamines, cationic polyurathenes, aminecelluloses, polysacchride amines, and combinations thereof.

12. (original) A system as in claim 10, wherein the crashing agent is a multivalent metal ion or ionic group is provided by a member selected from the group consisting of multivalent metal nitrates, EDTA salts, phosphonium halide salts, organic acids, chloride salts, and combinations thereof.

13. (original) A system as in claim 10, wherein the crashing agent is an acid selected from the group consisting of succinic acid, glycolic acid, citric acid, nitric acid, hydrochloric acid, phosphoric acid, sulfuric acid, polyacrylic acid, acetic acid, malonic acid, maleic acid, ascorbic acid, glutaric acid, fumaric acid, tartaric acid, lactic acid, nitrous acid, boric acid, carbonic acid, carboxylic acids such as formic acid, chloroacetic acid, dichloroacetic acid, trichloroacetic acid, fluoroacetic acid, trimethylacetic acid, methoxyacetic acid, mercaptoacetic acid, propionic acid, butyric acid, valeric acid, caprioc acid, caprylic acid, capric acid, lauric acid, myristic acid, palmitic acid, stearic acid, oleic acid, rinolic acid, rinoleic acid, cyclohexanecarboxylic acid, phenylacetic acid, benzoic acid, o-toluic acid, m-toluic acid, p-toluic acid, o-chlorobenzoic acid, m-chlorobenzoic acid, p-chlorobenzoic acid, o-bromobenzoic acid, m-bromobenzoic acid, p-bromobenzoic acid, o-nitrobenzoic acid, m-nitrobenzoic acid, p-nitrobenzoic acid, oxalic acid, adipic acid, phthalic acid, isophthalic acid, terephthalic acid, salicylic acid, p-hydrobenzoic acid,

anthranilic acid, m-aminobenzoic acid, p-aminobenzoic acid, benzenesulfonic acid, methylbenzenesulfonic acid, ethylbenzenesulfonic acid, dodecylbenzenesulfonic acid, 5-sulfosalicylic acid, 1-sulfonaphthalene, hexanesulfonic acid, octanesulfonic acid, dodecanesulfonic acid, amino acids such as glycine, alanine, valine, α-aminobutyric acid, α-aminobutryic acid, α-alanine, taurine, serine, α-amino-n-caprioc acid, leucine, norleucine, phenylalanine, and combinations thereof.

14. (original) A system as in claim 4, wherein the latex particulates comprise randomly polymerized copolymers, said latex particulates being predominantly from 20 nm to 500 nm in size and predominantly from 10,000 Mw to 2,000,000 Mw.

15. (original) A system as in claim 6, wherein the latex particulates comprise randomly polymerized copolymers, said latex particulates being predominantly from 20 nm to 500 nm in size and predominantly from 10,000 Mw to 2,000,000 Mw.

16. (previously presented) A system as in claim 1, wherein the calendering device includes a pair of rollers that are configured to apply pressure and heat to the offset media once the ink-jet ink is printed thereon.

17. (previously presented) A method of printing images on offset media, comprising:

a) ink-jetting an aqueous ink-jet ink onto offset media to form a printed image, said ink-jet ink including a pigment colorant and latex particulates dispersed therein;

b) underprinting or overprinting a fixer composition with respect to the ink-jet ink, said fixer composition including a crashing agent that is reactive with a component of the ink-jet ink.

c) applying pressure to the printed image such that a physical property of the printed image is altered by the pressure, wherein the pressure is mechanical pressure applied at from 500 psi to 3000 psi; and

d) applying heat to the printed image, wherein the heat to be applied is from 20°C to 90°C.

18. (canceled).

19. (previously presented) A method as in claim 17, wherein the crashing agent is present in the fixer composition at from 0.1 wt% to 10 wt%.

20. (previously presented) A method as in claim 17, wherein the latex particulates are dispersed in the ink-jet ink at from 0.1 wt% to 15 wt%.

21. (original) A method as in claim 17, further comprising the step of overcoating the ink-jet ink that was ink-jetted on the offset media with an overcoat composition, said overcoat composition including from 0.1 wt% to 15 wt% of latex particulates.

22. (original) A method as in claim 17, wherein the pigment colorant is present in the ink-jet ink at from 0.5 wt% to 10 wt%.

23 - 25. (canceled).

26. (previously presented) A method as in claim 17, wherein the crashing agent is selected from the group consisting of cationic polymers, multivalent metal ions or ionic groups, acids, and combinations thereof.

27. (original) A method as in claim 20, wherein the latex particulates comprise randomly polymerized copolymers, said latex particulates being predominantly from 20 nm to 500 nm in size and predominantly from 10,000 Mw to 2,000,000 Mw.

28. (original) A method as in claim 21, wherein the latex particulates comprise randomly polymerized copolymers, said latex particulates being predominantly from 20 nm to 500 nm in size and predominantly from 10,000 Mw to 2,000,000 Mw.

29. (original) A method as in claim 17, wherein the physical property is smoothness, wherein upon applying pressure, the printed image is modified from having a textured profile to a smoother profile.

30. (original) A method as in claim 17, wherein the physical property is flow, wherein upon applying pressure, the printed image is temporarily modified from a more solid configuration to a more liquid configuration.

31. (previously presented) A system for printing durable ink-jet ink images, comprising:

a) offset media;

b) an aqueous ink-jet ink comprising latex particulates dispersed therein and including a pigment colorant, said ink-jet ink being configured to be ink-jetted onto the offset media;

c) an overcoat composition including a liquid vehicle having latex particulates dispersed therein, said overcoat composition being configured to be overcoated with respect to the ink-jet ink, said latex particulates being present in the overcoat composition at from 0.1 wt% to 15 wt%; and

d) a calendering device configured for applying pressure and heat to offset media once the ink-jet ink is ink-jetted thereon, wherein the pressure is mechanical pressure applied at from 500 psi to 3000 psi, and wherein the heat to be applied is from 20°C to 90°C.

32. (previously presented) A system as in claim 31, further comprising a fixer composition including a crashing agent that is reactive with a component of the ink-jet ink, said fixer composition being configured to be overprinted or underprinted on the offset media with respect to the ink-jet ink..

33. (previously presented) A system as in claim 32, wherein the crashing agent is present in the fixer composition at from 0.1 wt% to 10 wt%.

34. (previously presented) A system as in claim 32, wherein the crashing agent is selected from the group consisting of cationic polymers, multivalent metal ions or ionic groups, acids, and combinations thereof.

35. (previously presented) A system as in claim 32, wherein the crashing agent is a cationic polymer selected from the group consisting of polyvinylpyridines, polyalkylaminoethyl acrylates, polyalkylaminoethyl methacrylates, poly(vinyl imidazole), polyethyleneimines, polybiguanides, polyguanides, polyvinylamines, polyallylamines, polyacrylamines, polyacrylamides, polyquaternaryamines, cationic polyurathenes, aminecelluloses, polysacchride amines, and combinations thereof.

36. (previously presented) A system as in claim 32, wherein the crashing agent is a multivalent metal ion or ionic group is provided by a member selected from the group consisting of multivalent metal nitrates, EDTA salts, phosphonium halide salts, organic acids, chloride salts, and combinations thereof.

37. (previously presented) A system as in claim 32, wherein the crashing agent is an acid selected from the group consisting of succinic acid, glycolic acid, citric acid, nitric acid, hydrochloric acid, phosphoric acid, sulfuric acid, polyacrylic acid, acetic acid, malonic acid, maleic acid, ascorbic acid, glutaric acid, fumaric acid, tartaric acid, lactic acid, nitrous acid, boric acid, carbonic acid, carboxylic acids such as formic acid, chloroacetic acid, dichloroacetic acid, trichloroacetic acid, fluoroacetic acid, trimethylacetic acid, methoxyacetic acid, mercaptoacetic acid, propionic acid, butyric acid, valeric acid, caproic acid, caprylic acid, capric acid, lauric acid, myristic acid, palmitic acid, stearic acid, oleic acid, rinolic acid, rinoleic acid, cyclohexanecarboxylic acid, phenylacetic acid, benzoic acid, o-toluic acid, m-toluic acid, p-toluic acid, o-chlorobenzoic acid, m-chlorobenzoic acid, p-chlorobenzoic acid, o-bromobenzoic acid, m-bromobenzoic acid, p-bromobenzoic acid, o-nitrobenzoic acid, m-nitrobenzoic acid, p-nitrobenzoic acid, oxalic acid, adipic acid, phthalic acid, isophthalic acid, terephthalic acid, salicylic acid, p-hydrobenzoic acid, anthranilic acid, m-aminobenzoic acid, p-aminobenzoic acid,

benzenesulfonic acid, methylbenzenesulfonic acid, ethylbenzenesulfonic acid, dodecylbenzenesulfonic acid, 5-sulfosalicylic acid, 1-sulfonaphthalene, hexanesulfonic acid, octanesulfonic acid, dodecanesulfonic acid, amino acids such as glycine, alanine, valine, α-aminobutyric acid, α-aminobutryic acid, α-alanine, taurine, serine, α-amino-n-caprioc acid, leucine, norleucine, phenylalanine, and combinations thereof.

38. (previously presented) A system as in claim 31, wherein the latex particulates are dispersed in the ink-jet ink at from 0.1 wt% to 15 wt%.

39. (previously presented) A system as in claim 38, wherein the latex particulates in the ink-jet ink comprises randomly polymerized copolymers, said latex particulates being predominantly from 20 nm to 500 nm in size and predominantly from 10,000 Mw to 2,000,000 Mw.

40. (previously presented) A system as in claim 31, wherein the latex particulates in overcoat composition comprises randomly polymerized copolymers, said latex particulates being predominantly from 20 nm to 500 nm in size and predominantly from 10,000 Mw to 2,000,000 Mw.

41. (previously presented) A system as in claim 31, wherein the calendering device includes a pair of rollers that are configured to apply pressure and heat to the offset media once the ink-jet ink is printed thereon.